

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application:

1-7. (Cancelled)

8. (Currently Amended) A method for manufacturing a glass substrate for an information recording medium, the manufacturing method comprising:

a ~~first~~ pre-grinding washing step for washing a surface of a polished disk-shaped glass plate with ~~[[an]] a strong acid washing liquid and then with a strong alkaline washing liquid~~, wherein an altered surface layer is formed on the surface of the glass ~~substrate plate~~ by washing with the strong acid washing liquid in the first pre-grinding washing step; thereafter

a step for grinding the altered surface layer for a depth of 0.5 nm or more with abrasion grains so that the altered surface layer has a thickness of 3 nm or less; and thereafter

a ~~second~~ post-grinding washing step for washing the surface with an alkaline washing liquid, wherein the altered surface layer formed by acidic washing in the ~~first~~ pre-grinding washing step is removed by the step for grinding and the ~~second~~ post-grinding washing step.

9. (Previously Presented) The manufacturing method according to claim 8, wherein the removing step includes scrubbing the surface with a scrub member in a circumferential direction of the glass plate while supplying the surface with diamond abrasion grains.

10. (Currently Amended) The manufacturing method according to claim 8, wherein the ~~first~~ pre-grinding washing step includes immersing the polished glass plate in ~~[[a]] the strong acid solution washing liquid~~ and then immersing ~~the glass plate~~ in ~~[[a]] the strong alkaline solution washing liquid~~.

11. **(Currently Amended)** A method for manufacturing a glass substrate for an information recording medium, the manufacturing method comprising:

preparing a disk-shaped glass plate containing silicon oxide, aluminum oxide, and alkaline earth metal oxide with a uniform chemical composition;

polishing the glass plate to form a smooth surface;

immersing the polished glass plate in ~~[[an]]~~ a strong acid solution to form an altered surface layer in which the ingredient ratio of at least one of aluminum oxide and alkaline earth metal oxide is decreased and then in a strong alkaline solution; thereafter

removing at least part of the altered surface layer with an abrasive to such that the altered surface layer has a thickness of 3 nm or less; and thereafter

uniformly etching the altered surface layer having a thickness of 3 nm or less while washing off the abrasive with an alkaline washing liquid.

12. **(Currently Amended)** The manufacturing method according to claim 11, wherein the ~~acid solution is a~~ strong acid solution ~~having~~ has a pH of 3.0 or less.

13. **(Currently Amended)** The manufacturing method according to claim 12, wherein ~~said forming a surface layer includes immersing the glass plate in the strong acid solution and then immersing the glass plate in a~~ the strong alkaline solution ~~having~~ has a pH value of 10.5 or greater.

14. **(Previously Presented)** The manufacturing method according to claim 11, wherein said forming the surface layer includes removing adhered substances that are adhered on the smooth surface.

15. **(Currently Amended)** The manufacturing method according to claim 11, wherein the alkaline washing liquid used in said etching is an alkaline solution having a pH of 11.0 to 13.0.

16. **(Previously Presented)** The manufacturing method according to claim 8, wherein the step for grinding is a texture formation step for forming a texture on the surface of the glass plate.

17. **(Currently Amended)** The manufacturing method according to claim 8, wherein the ~~first~~ pre-grinding washing step, the step for grinding, and the ~~second~~ post-grinding washing step are controlled to adjust the thickness of the altered surface layer finally remained on the glass plate.

18. **(Previously Presented)** The manufacturing method according to claim 11, wherein said immersing, said removing, and said uniformly etching are controlled to adjust the thickness of the altered surface layer finally remained on the glass plate.

19. **(Currently Amended)** The manufacturing method according to claim 8, wherein the ~~first~~ pre-grinding washing step, the step for grinding, and the ~~second~~ post-grinding washing step are sequentially performed.

20. **(Previously Presented)** The manufacturing method according to claim 8, wherein the glass substrate is made of a multi-component glass material selected from the group consisting of soda lime glass, aluminosilicate glass, borosilicate glass and crystallization glass.

21. **(Currently Amended)** The manufacturing method according to claim 8, wherein a chemical strengthening process is performed between any one of the ~~first~~ pre-grinding washing step, the step for grinding, and the ~~second~~ post-grinding washing step.

22. **(Currently Amended)** The manufacturing method according to claim 8, wherein the ~~first~~ pre-grinding washing step includes immersing the polished glass substrate plate in ~~[[a]] the~~ strong acid washing liquid having a pH of 3.0 or less and then immersing ~~the glass substrate~~ in ~~[[a]] the~~ strong alkaline ~~solution~~ washing liquid having a pH of 10.5 or greater.

23. **(Currently Amended)** The manufacturing method according to claim 22, wherein the immersing in ~~[[a]] the~~ strong acid washing liquid and the immersing in ~~[[a]] the~~ strong alkaline ~~solution~~ washing liquid are performed for the same immersion time period under the same temperature.

24. **(Currently Amended)** The manufacturing method according to claim 23, wherein the ~~first~~ pre-grinding washing step includes immersing the polished glass substrate plate in 0.01% of a hydrofluoric acid solution for three minutes under a temperature of 35°C and then immersing ~~the glass substrate~~ in 0.01% of a potassium hydroxide solution for three minutes under a temperature of 35°C.

25. **(Previously Presented)** The manufacturing method according to claim 11, wherein the immersing step, the removing step and the uniformly etching step are sequentially performed.

26. **(Previously Presented)** The manufacturing method according to claim 8, wherein a deviation rate of surface roughness Ra of the glass substrate is less than or equal to 3%.

27. **(Previously Presented)** The manufacturing method according to claim 11, wherein a deviation rate of surface roughness Ra of the glass substrate is less than or equal to 3%.

28. **(New)** The manufacturing method according to claim 8, wherein the pre-grinding washing step includes immersing the polished glass plate in the strong acid washing liquid and subsequently in the strong alkaline washing liquid for the same immersion time period under the same temperature with the strong acid washing liquid and the strong alkaline washing liquid having the same concentration.

29. **(New)** The manufacturing method according to claim 11, wherein the immersing step includes immersing the polished glass plate in the strong acid solution and subsequently in the strong alkaline solution for the same immersion time period under the same temperature with the strong acid solution and the strong alkaline solution having the same concentration.